## THE INVENTION CLAIMED IS:

1      1. A method for use in a network over which multiple devices belonging to

2  a defined set communicate with each other by sending messages, the method

3  comprising:

4      in each message, including a network descriptor that is determined as a

5  known function of at least a particular identifier associated with at least one of

6  the devices;

7      characterized in that the method further comprises:

8      changing the network descriptor over time, whereby the network

9  descriptors in the messages received by a device outside the defined set are

10  impeded from being associated with a particular device from within the set.


1      2. The method of claim 1 wherein the network descriptor is changed

2  when a session begins on one of the devices within the set.


1      3. The method of claim 2 wherein the network descriptor is computed as

2  a known function of a seed and the particular identifier associated with at least

3  one of the devices.


1      4. The method of claim 3 wherein the known function is a one-way

2  function.


1      5. The method of claim 3 wherein the seed is at least a first random

2  number generated by at least one of the devices for use in computing the

3  network descriptor used in messages within a current session.

1      6. The method of claim 5 wherein the seed is combination of the first

2    random number and at least a second random number generated by at least one

3    of the devices for use in computing the network descriptor used in messages

4    within at least one previous session.

1      7. The method of claim 2 wherein after a session begins the network

2    descriptor is further changed on a periodic basis within the duration of the

3    session.

1      8. The method of claim 7 wherein the network descriptor is computed as

2    a known function of a seed and the particular identifier associated with at least

3    one of the devices.

1      9. The method of claim 8 wherein the seed is a combination of at least a

2    time parameter associated with at least one of the devices and a first random

3    number generated by at least one of the devices for use in computing the

4    network descriptor used in messages within a current session.

1      10. The method of claim 9 wherein the seed is a combination of the time

2    parameter associated with at least one of the devices, the first random number,

3    and at least a second random number generated by at least one of the devices

4    for use in computing the network descriptor used in messages within at least one

5    previous session.

1      11. A method for use in a wireless network over which multiple Bluetooth-

2    enabled devices within a defined set communicate with each other by sending

3    messages to and from a master device within the set, the method comprising:

4        in each message, sending a channel access code (CAC) that is a known

5    function of a Bluetooth address (BD_ADDR) associated with the master device,

6        characterized in that the method further comprises:

7        changing the CAC over time, whereby the CACs in the messages

8    received by a device outside the defined set are impeded from being associated

9    with a particular device from within the set.

1        12. The method of claim 11 wherein the CAC is changed when a session

2    begins on one of the devices within the set.

1        13. The method of claim 12 wherein the CAC is computed as a known

2    function of a seed and the BD_ADDR of the master device.

1        14. The method of claim 13 wherein the known function is a one-way

2    function.

1        15. The method of claim 13 wherein the seed is at least a first random

2    number generated by at least one of the devices for use in computing the CAC

3    used in messages within a current session.

1        16. The method of claim 15 wherein the seed is a combination of the first

2    random number and at least a second random number generated by at least one

3    of the devices for use in computing the CAC used in messages within at least

4    one previous session.

1        17. The method of claim 12 where after a session begins the CAC is

2    further changed on a periodic basis within the duration of the session.

1    18. The method of claim 17 wherein the CAC is computed as a known

2    function of a seed and the BD_ADDR associated with the master device.


1    19. The method of claim 18 wherein the seed is a combination of at least

2    a time parameter associated with at least one of the devices and a first random

3    number generated by at least one of the devices for use in computing the CAC

4    used in messages within a current session.


1    20. The method of claim 19 wherein the seed is a combination of the time

2    parameter associated with at least one of the devices, the first random number,

3    and at least a second random number generated by at least one of the devices

4    for use in computing the CAC used in messages within at least one previous

5    session.


1    21. Apparatus for use in a device that sends and receives messages to

2    other devices within a defined set on a network, said apparatus comprising:

3    means for computing for inclusion within each message a network

4    descriptor as a known function of at least a particular identifier associated with at

5    least one of the devices within the set; and

6    means for changing the network descriptor over time, whereby the

7    network descriptors in the messages received by a device outside the defined

8    set are impeded from being associated with a particular device from within the

9    set.


1    22. The apparatus of claim 21 further comprising means for detecting the

2    beginning of a session on one of the devices within the set, the changing means

3     causing the computing means to recompute the network descriptor when the

4     beginning of a session is detected.

1          23.  The apparatus of claim 22 further comprising means for providing a

2     seed to the computing means, the computing means computing the network

3     descriptor as a known function of the seed and the particular alphanumeric

4     characteristic associated with at least one of the devices.

1          24.  The apparatus of claim 23 wherein the known function is a one-way

2     function.

1          25.  The apparatus of claim 23 wherein the seed is at least a first random

2     number generated for use in computing the network descriptor used in

3     messages within a current session.

1          26.  The apparatus of claim 25 wherein the seed is a combination of the

2     first random number and at least a second random number generated for use in

3     computing the network descriptor used in messages within at least one previous

4     session.

1          27.  The apparatus of claim 22 wherein the changing means changes the

2     network descriptor on a periodic basis within the duration of a session once the

3     session begins.

1          28.  The apparatus of claim 27 further comprising means for providing a

2     seed to the computing means, the computing means computing the network

3    descriptor as a known function of the seed and the particular identifier

4    associated with at least one of the devices.


1    29. The apparatus of claim 28 wherein the seed is a combination of at

2    least a time parameter associated with at least one of the devices and a first

3    random number generated by at least one of the devices for use in computing

4    the network descriptor used in messages within a current session.


1    30. The apparatus of claim 29 wherein the seed is a combination of the

2    time parameter associated with at least one of the devices, the first random

3    number and at least a second random number generated by at least one of the

4    devices for use in computing the network descriptor used in messages within at

5    least one previous session.


1    31. Apparatus for use in a Bluetooth-enabled device that sends and

2    receives wireless messages to other Bluetooth-enabled devices within a defined

3    set, said apparatus comprising:

4    means for computing for inclusion within each message a channel access

5    code (CAC) as a known function of a Bluetooth address (BD_ADDR) associated

6    with a master device within the defined set; and

7    means for changing the CAC over time, whereby the CACs in the

8    messages received by a device outside the defined set are impeded form being

9    associated with a particular device from within the set.


1    32. The apparatus of claim 31 further comprising means for detecting the

2    beginning of a session on one of the devices within the set, the changing means

3    causing the computing means to recompute the CAC when the beginning of a

4    session is detected.


1        33.  The apparatus of claim 32 further comprising means for providing a

2    seed to the computing means, the computing means computing the CAC as a

3    known function of the seed and the BD_ADDR associated with the master

4    device.


1        34.  The apparatus of claim 33 wherein the known function is a one-way

2    function.


1        35.  The apparatus of claim 33 wherein the seed is at least a first random

2    number generated by at least one of the devices for use in computing the CAC

3    used in messages within a current session.


1        36.  The apparatus of claim 35 wherein the seed is a combination of the

2    first random number and at least a second random number generated by at least

3    one of the devices for use in computing the CAC used in messages within at

4    least one previous session.


1        37.  The apparatus of claim 32 wherein the changing means changes the

2    CAC on a periodic basis within the duration of a session once the session

3    begins.


1        38.  The apparatus of claim 37 further comprising means for providing a

2    seed to the computing means, the computing means computing the CAC as a

3    known function of the seed and the BD_ADDR associated with the master

4    device.


1        39.  The apparatus of claim 38 wherein the seed is a combination of at

2    least a time parameter associated with at least one of the devices and a first

3    random number generated by at least one of the devices for use in computing

4    the CAC used in messages within a current session.


1        40.  The apparatus of claim 39 wherein the seed is a combination of the

2    time parameter associated with at least one of the devices, the first random

3    number, and at least a second random number generated by at least one of the

4    devices for use in computing the CAC used in messages within at least one

5    previous session.